

EXECUTIVE SUMMARY

Period, Inc., has applied to the Division for Air Quality for a permit renewal for the operation of a wooden furniture manufacturing facility in Madisonville, Kentucky. This operation involves wood processing and finishing equipment. Kiln-dried lumber is shaped and smoothed using a variety of woodworking equipment. Pieces are glued, as necessary, using hand-held glue guns. Finishing takes place both on an assembly line and in a separate off-line booth. Pieces are stained and varnished, or stained, sealed, and top coated. The booths are lined with a strippable coating. Ovens are used after sealing and after application of each of the two top coatings, for a total of three ovens.

Currently, Period is permitted under a Synthetic Minor/Title V operating permit, #V-00-021. The Synthetic Minor/Title V permit was originally issued because the potential to emit volatile organic compounds (VOC) was greater than 250 tons per year. The potential emission calculations were based on vendor spray gun information, data from Material Safety Data Sheets for the coatings, and estimated production rates.

The potential to emit of volatile organic compounds (VOC) is less than 250 tons per year and actual emission rates are significantly less than major source thresholds for both VOC and hazardous air pollutants (HAP). Since the issuance of the Synthetic Minor/Title V permit on May 25, 2000, actual production records indicate that the maximum application rate is less than originally expected. Additionally, environmentally-friendly coatings are being used by the facility. Consequently, the potential to emit volatile organic compounds (VOC) is less than 250 tons per year and actual emission rates are significantly less than major source thresholds for both VOC and hazardous air pollutants (HAP). Period requested that their renewal permit be changed to a conditional major. But, since the NESHAP for wood furniture manufacturing is applicable, they must remain a Title V source. Period has voluntarily accepted a plantwide VOC emission limit of 90 tons for any consecutive twelve (12) month period. In accepting this limit, Period will avoid applicability of 401 KAR 50:012, General Application of Administrative Regulations and Standards.

40 CFR 63 National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations, limits the volatile hazardous air pollutant (VHAP) content of coatings used in furniture finishing operations to 1.0 pound VHAP/pound of solid for washcoats, sealers, topcoats, basecoats, stains, and enamels. Thinners are limited to 10 percent VHAP, by weight. The source can, as an alternative, achieve a weighted average VHAP content for all coatings of 0.80 pound VHAP/pound solid, as applied.

A preliminary determination was made to approve the permit and public notice was placed in The Messenger, in Madisonville, Kentucky on February 26, 2006. The comment period expired on March 28, 2006, with no comments being received during the public comment period.

In conclusion, a thorough analysis has been made of all relevant information available, which pertains to this application. The Division for Air Quality has concluded that the operation of this facility will comply with all applicable regulatory requirements. Therefore, the Division is issuing a proposed permit. The EPA has 45 days to comment on this permit.